IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS AUSTIN DIVISION

DH INTERNATIONAL LTD.,		
	Plaintiff,	Case No. 1:23-cv-01114
v.		JURY TRIAL DEMANDED
APPLE INC.,		
	Defendant.	

DEFENDANT APPLE INC.'S ANSWER TO COMPLAINT FOR PATENT INFRINGEMENT

Defendant Apple Inc. ("Apple") respectfully submits this response to the Complaint filed by Plaintiff DH International Ltd. ("DH International"). Except as expressly admitted below, Apple denies each and every allegation set forth in the Complaint. Apple responds to the numbered paragraphs of the Complaint and the prayer for relief as follows:

NATURE OF THE ACTION¹

Complaint No. 1: This is a civil action for patent infringement under the patent laws of the United States of America, 35 U.S.C. § 1 *et seq*.

Apple admits that DH International has filed suit for patent infringement under 35
 U.S.C. § 1 et seq.

¹ Apple is adopting all headings used in DH International's Complaint for ease of reference. To the extent these headings contain any allegations to which a response is required, Apple denies any such allegations.

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Complaint No. 2: DH International is the owner of all rights, title, and interest in U.S. Patent No. 7,628,333 (the "'333 Patent") and U.S. Patent No. 9,022,294 (the "'294 Patent") (collectively, the "Asserted Patents"), attached as Exhibit A and Exhibit B respectively and incorporated by reference in their entirety.

2. Apple admits that documents that purport to be copies of the '333 and '294 patents are attached to the Complaint as Exhibits A and B respectively. Apple lacks sufficient information to form a belief as to the truth of the remaining allegations set forth in Paragraph 2 and on that basis denies them.

Complaint No. 3: Defendant has infringed and continues to infringe one or more claims of the Asserted Patents by making, using, importing, offering to sell, and selling within the United States, including in this District, certain products and services. DH International seeks to recover monetary damages, attorneys' fees, and costs.

3. Apple denies that any of its products or services infringe the asserted patents. Apple denies the remaining allegations contained in Paragraph 3.

THE PARTIES

Complaint No. 4: DH International is a Canadian business organized as a private limited company under the laws of Canada, with a principal place of business at 4660 rue Sainte-Catherine E, Montréal, Québec H1V 1Y9, Canada.

4. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 4 and on that basis denies them.

Complaint No. 5: DH International is the true and correct owner of the Asserted Patents and holds all rights necessary to bring this action. On July 26, 2023, the attached assignments

were filed with the U.S. Patent Office transferring all right, title, and interest from G. Holdings Ltd. to DH International Exhibit C.

5. Apple admits that a document titled "Patent Assignment" is attached to the Complaint as Exhibit C. Apple lacks sufficient information to form a belief as to the truth of the remaining allegations set forth in Paragraph 5 and on that basis denies them.

Complaint No. 6: On information and belief, Defendant Apple is a corporation organized under the laws of the State of California, with a principal place of business at One Apple Park Way, Cupertino, California, 95014.

6. Apple admits that it is a corporation organized under the laws of the State of California with a principal place of business at One Apple Park Way, Cupertino, California, 95014.

Complaint No. 7: This action arises under the patent laws of the United States, Title 35 of the United States Code. Subject matter jurisdiction is proper in this Court pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. Apple admits that this Court has subject matter jurisdiction over the subject matter of this action.

Complaint No. 8: The Court has personal jurisdiction over Defendant for at least the following reasons: (1) Defendant has committed acts of patent infringement in this District and elsewhere in Texas; (2) Defendant regularly does business or solicits business in this District and elsewhere in Texas, including through their wholly-owned subsidiary entities; (3) Defendant engages in other persistent courses of conduct and derives substantial revenue from products and/or services provided to individuals in this District and elsewhere in Texas; and (4) Defendant has purposefully established substantial, systematic, and continuous contacts with this District,

including the physical location at 12545 Riata Vista Circle, Austin, Texas, 78727, the physical location at 5501 West Palmer Lane, Austin, Texas, 78727, and the physical location at 6900 West Parmer Lane, Austin, Texas, 78727, and should reasonably expect to be subject to suit in this District.

8. Apple admits that this Court has general jurisdiction over Apple in this action. Apple denies the remaining allegations in Paragraph 8 and specifically denies that it has committed any acts of infringement in this District or elsewhere.

Complaint No. 9: Venue is proper in this District as to Defendant Apple under the provisions of 28 U.S.C. §§ 1391 and 1400(b) at least because Defendant Apple has committed acts of infringement in this District and has regular and established places of business in this District at 12545 Riata Vista Circle, Austin, Texas 78727, and at 6900 West Parmer Lane, Austin, Texas, 78727.

9. DH International's venue allegations call for a legal conclusion and therefore no answer is required. Apple admits that it has an office at 12545 Riata Vista Circle, Austin, Texas 78727 and that construction is ongoing for a facility at 6900 West Parmer Lane, Austin, Texas 78729. Apple denies the remaining allegations in Paragraph 9 and specifically denies that it has committed any acts of patent infringement in this District or elsewhere.

Complaint No. 10: On information and belief, Defendant Apple has thousands of employees within this District. On information and belief, third-party witnesses with knowledge regarding the accused functionality reside within this District.

10. Apple admits that it has employees within this District. Apple lacks sufficient information to form a belief as to the truth of the remaining allegations set forth in Paragraph 10 and on that basis denies them.

Complaint No. 11: Defendant Apple has committed tortious acts within Texas and this District, and the causes of action set forth in this Complaint arise from those acts. Defendant Apple develops, manufactures, imports, distributes, and sells mobile telephone and computing products that infringe the Asserted Patents, which are, and have been imported, offered for sale, sold (directly or through Defendant's distribution network), purchased, and used in Texas and within this District. Defendant also places infringing products within the stream of commerce, with the knowledge and/or understanding that such infringing products will be sold and/or used in Texas and in this District.

Apple specifically denies that any of its products infringe the asserted patents.Apple denies the remaining allegations contained in Paragraph 11.

BACKGROUND

Complaint No. 12: The inventor and principal owner of DH International, Mr. Joël Gaillard, began to pay attention to electronic payments in 1998-99 after visiting a payment card lounge in Miami. His pioneering work in developing a better technology that offers a new, simple, fast, universal, and secure way to make mobile payments resulted in the Asserted Patents and patents in Canada, India, and China.

12. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 12 and on that basis denies them.

Complaint No. 13: DH International has made significant investments in the development of a computer platform and a secure payment and mobile marketing service called MoneyCell, the first Canadian eWallet. Tests were carried out for a year and a half at Ecole de Technologie Superieure in Montreal to prepare its commercial deployment. The innovative technology in MoneyCell won several awards in Canada. *See*

https://www.moneycell.com/about.html. Mr. Gaillard has invested upwards of \$5 million in developing the MoneyCell Technology and related patent portfolio.

13. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 13 and on that basis denies them.

U.S. PATENT NO. 7,628,333

Complaint No. 14: On April 14, 2003, the United States Patent and Trademark Office duly and legally issued the '333 Patent, titled "Portable Electronic Device Capable of Alternative Data Conveyance Operations Responsive to an Invariable Activation Command," after a full and fair examination.

14. Apple admits that U.S. Patent No. 7,628,333 is titled "Portable Electronic Device Capable of Alternative Data Conveyance Operations Responsive to an Invariable Activation Command." Apple lacks sufficient information to form a belief as to the truth of the remaining allegations set forth in Paragraph 14 and on that basis denies them.

Complaint No. 15: **Exhibit A** is a true and correct copy of the '333 Patent.

15. Apple admits that a document that purports to be a copy of the '333 patent is attached as Exhibit A. Apple lacks sufficient information to form a belief as to the truth of the remaining allegations set forth in Paragraph 15 and on that basis denies them.

Complaint No. 16: The '333 Patent is valid and enforceable under United States patent laws.

16. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 16 and on that basis denies them.

Complaint No. 17: Plaintiff is the owner of the '333 Patent, having received all right, title, and interest in and to the '333 Patent.

17. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 17 and on that basis denies them.

Complaint No. 18: Plaintiff possesses all rights of recovery under the '333 Patent, including the exclusive right to recover for past infringement.

18. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 18 and on that basis denies them.

U.S. PATENT NO. 9,022,294

Complaint No. 19: On October 21, 2009, the United States Patent and Trademark Office duly and legally issued the '294 Patent, titled "Portable Electronic Device and Method for Alternative Data Conveyance Operations Responsive to an Invariable Activation Command," after a full and fair examination.

19. Apple admits that U.S. Patent No. 9,022,294 is titled "Portable Electronic Device and Method for Alternative Data Conveyance Operations Responsive to an Invariable Activation Command." Apple lacks sufficient information to form a belief as to the truth of the remaining allegations set forth in Paragraph 19 and on that basis denies them.

Complaint No. 20: Exhibit B is a true and correct copy of the '294 Patent.

20. Apple admits that a document that purports to be a copy of the '294 patent is attached as Exhibit B. Apple lacks sufficient information to form a belief as to the truth of the remaining allegations set forth in Paragraph 20 and on that basis denies them.

Complaint No. 21: The '294 Patent is valid and enforceable under United States patent laws.

21. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 21 and on that basis denies them.

Complaint No. 22: Plaintiff is the owner of the '294 Patent, having received all right, title, and interest in and to the '294 Patent.

22. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 22 and on that basis denies them.

Complaint No. 23: Plaintiff possesses all rights of recovery under the '294 Patent, including the exclusive right to recover for past infringement.

23. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 23 and on that basis denies them.

Complaint No. 24: The claims of the Asserted Patents are directed to a patent-eligible, non-abstract invention.

24. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 24 and on that basis denies them.

Complaint No. 25: The Asserted Patents generally provide for a portable electronic device (*e.g.*, a cellular phone) that can be used to communicate with an external data exchange device (*e.g.*, system for performing translation such as POS system and/or transaction server) upon receiving an activation cue. The portable electronic device contains a switching element (*e.g.*, alternating data conveyance implemented in source code on the portable electronic device), which is assigned different states based on receiving or not receiving an activation cue. The portable electronic device includes a control device that when selectively triggered issues an invariable activation command (*e.g.*, button click, screen interaction, and/or biometric verification). When the control device is triggered, different functions will be performed based on the state of the switching element. The Asserted Patents also provide for methods and systems that employ such portable electronic devices.

25. Apple lacks sufficient information to form a belief as to the truth of the allegations set forth in Paragraph 25 and on that basis denies them.

APPLE'S INFRINGING PRODUCTS AND ACTIVITIES

Complaint No. 26: Apple Pay is a mobile payment and digital wallet service offered by Apple.

26. Apple admits that Apple Pay is a mobile payment and electronic wallet service offered by Apple.

Complaint No. 27: Apple Pay "is the one way to pay. It replaces your physical cards and cash with an easier, safer, more secure, and private payment method—whether you're in a store, online, or sending cash to friends or family." https://www.apple.com/apple-pay/ (last visited Sept. 5, 2023). Apple Pay is accepted "on millions of websites and apps" and is "accepted at over 85 percent of retailers in the U.S. …." *Id*.

27. Apple admits that the quoted language is taken from Apple's website. Apple admits that Apple Pay is an easier, safer, and more secure payment method than physical cards and cash that is widely accepted by retailers, websites, and apps in the U.S. Apple denies that the quoted language has any relevance to the asserted patents or this Action.

Complaint No. 28: Apple Pay is "ready and set. Just go." https://www.apple.com/apple-pay/ (last visited Sept. 5, 2023). It can be set up "in seconds.... Just add your credit or debit card to the Wallet app on your iPhone and you're ready to go." *Id.* Online purchases can be made through Apple Pay using an iPhone, iPad, or Mac. *Id*.

28. Apple admits that the quoted language is taken from Apple's website. Apple admits that Apple Pay can be set up in seconds and can be used to make online purchases using

an iPhone, iPad, or Mac. Apple denies that the quoted language has any relevance to the asserted patents or this Action.

Complaint No. 29: Apple designs, makes, uses, offers to sell, sells, imports, supplies, and otherwise distributes "Apple Pay" software and services under the trademark "Apple" (the "Accused Products"). https://www.apple.com/apple-pay/ (last visited Sept. 5, 2023).

29. Apple admits that Apple designs, makes, imports and distributes "Apple Pay" software and services in the United States under the trademark "Apple." Apple denies the remaining allegations in Paragraph 29.

Complaint No. 30: Apple Pay is implemented on and currently compatible with Apple portable electronic devices—"Apple Pay is built into iPhone, Apple Watch, Mac and iPad. No separate app to download."—including at least the iPhone 14 Pro, iPhone 14, iPhone 13, iPhone SE, iPhone 12, iPhone 11, Apple Watch Ultra, Apple Watch Series 8, and Apple Watch SE (collectively, "Apple mobile devices"). See https://www.apple.com/iphone/ (last visited Sept. 5, 2023); https://www.apple.com/watch/ (last visited Sept. 5, 2023).

30. Apple admits that Apple Pay is implemented on, compatible with, and built into Apple mobile devices such as various versions of iPhone, Apple Watch, Mac, and iPad, and that there is no separate app to download.

Complaint No. 31: The current and previous versions of Apple Pay and Apple mobile devices are non-limiting instances of the Accused Products. The Accused Products practice the claims of the '333 Patent and '294 Patent.

31. Apple denies the allegations contained in Paragraph 31.

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 7,628,333

Complaint No. 32: Plaintiff restates, realleges, and incorporates by reference each and every allegation set forth in Paragraphs 1-31 of this Complaint.

32. Apple incorporates its responses to Paragraphs 1 through 31 herein by reference.

Complaint No. 33: Defendant has directly infringed and continues to infringe at least claim 1 of the '333 Patent in violation of 35 U.S.C. § 271 *et seq.*, by making, using, offering for sale, selling in the United States, and/or importing into the United States, without authority or license, the Accused Products.

33. Apple denies the allegations contained in Paragraph 33.

Complaint No. 34: The Accused Products meet all the limitations of at least claim 1 of the '333 Patent.

34. Apple denies the allegations contained in Paragraph 34.

Complaint No. 35: Specifically, claim 1 of the '333 Patent recites:

A portable electronic device, comprising: an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output;

a control device operatively linked to said electronic circuit, with an invariable activation command being issued when said control device is selectively triggered;

a user interface device operatively linked to said electronic circuit;

a data transceiver operatively linked to said electronic circuit, said data transceiver being for exchanging data between said electronic circuit and an external data exchange device, and for receiving a selectively emitted activation cue from a source external to said portable electronic device;

a data conveyance switching element operatively linked to said electronic circuit, said switching element being in an activated state upon an activation cue having been received by said data transceiver, and being in an inactive state when no activation cue was received by said data;

power means for providing power to said portable electronic device; wherein upon said control device being selectively triggered to issue and in

variable activation command;

if said switching element is in said activated state, a data exchange will be initiated through the instrumentality of said data transceiver for exchanging data between said electronic circuit and an external data exchange device;

if said switching element is in said inactive state, data will be conveyed from said electronic circuit to said user interface device for communicating information to the portable electronic device holder.

35. Apple admits that Paragraph 35 recites the limitations of claim 1 of the '333 Patent. Apple denies any remaining allegations in Paragraph 35.

Complaint No. 36: A non-limiting and exemplary claim chart comparing the Accused Products to at least claim 1 of the '333 Patent is attached as **Exhibit D** and is incorporated in its entirety. This description is based on publicly available information. Plaintiff reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

36. Apple admits that a document that purports to be a claim chart for claim 1 of the '333 patent is attached as Exhibit D to the Complaint. Apple denies that any of its products or

services infringe the asserted patents. Apple denies the remaining allegations contained in Paragraph 36.

Complaint No. 37: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices include an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output. For example, the Apple iPhone 13 Pro and the Apple iPhone 11 contain an electronic circuit that includes a processor, memory, and various I/O ports. See https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

37. Apple denies the allegations contained in Paragraph 37.

Complaint No. 38: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices include a control device (*e.g.*, a button selection with biometric or PIN verification) operatively linked to the electronic circuit (*e.g.*, a processor, memory, and various I/O ports), with an invariable activation command (*e.g.*, command to initiate a transaction) being issued when said control device is selectively triggered (*e.g.*, initiated within selected context). For example, the Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with an NFC reader. *See* https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023). In addition, Apple Pay can be used for in-app or online purchases by tapping the Apple Pay button. *Id*.

38. Apple denies the allegations contained in Paragraph 38.

Complaint No. 39: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices include a user interface device (*e.g.*, a display) operatively linked to the

electronic circuit (*e.g.*, a processor, memory, and various I/O ports). For example, the iPhone 11 and iPhone 13 Pro contain a Super Retina XDR OLED display.

https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

39. Apple denies the allegations contained in Paragraph 39.

Complaint No. 40: As in claim 1 of the '333 Patent, upon information and belief, Apple mobile devices include a data transceiver (*e.g.*, NFC functionality) operatively linked to the electronic circuit, the data transceiver being for exchanging data (*e.g.*, transaction information) between the electronic circuit (*e.g.*, a processor, memory, and various I/O ports) and an external data exchange device (*e.g.*, a point-of-sale system interface), and for receiving a selectively emitted activation cue (*e.g.*, a signal from an NFC device) from a source external (*e.g.*, a point-of-sale system NFC interface) to the portable electronic device. For example, the iPhone 11 and iPhone 13 Pro contain NFC chips for NFC communications.

https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

40. Apple denies the allegations contained in Paragraph 40.

Complaint No. 41: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices include a data conveyance switching element (*e.g.*, Apple Pay software) operatively linked to the electronic circuit, the switching element being in an activated state (*e.g.*, NFC transaction) upon an activation cue (*e.g.*, a signal from an NFC device) having been received by the data transceiver, and being in an inactive state (*e.g.*, idle state) when no

activation cue was received by the data transceiver. For example, Apple mobile devices will enter an NFC transaction state when a user double-clicks the side button and receives a signal from a POS device. Alternatively, if the user double-clicks the side button in a default state, when no signal from a POS device is received, it will be in an in-app or online transaction state. The Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with a point-of-sale system, such as an NFC reader. *See* https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023).

41. Apple denies the allegations contained in Paragraph 41.

Complaint No. 42: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices include means for providing power to the portable electronic device (*e.g.*, a processor, memory, and various I/O ports). For example, the iPhone 11 and iPhone 13 Procentain batteries to power the electronic devices.

https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

42. Apple denies the allegations contained in Paragraph 42.

Complaint No. 43: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices are enabled to perform certain functions upon the control device being selectively triggered to issue an invariable activation command (e.g., command to initiate a transaction). For example, Apple mobile devices will enter an NFC transaction state when a user double-clicks the side button and receives a signal from a POS device. Alternatively, if the user double-clicks the side button in a default state, when no signal from a POS device is received, it

will be in an in-app or online transaction state. The Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with a point-of-sale system, such as an NFC reader. See https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023).

43. Apple denies the allegations contained in Paragraph 43.

Complaint No. 44: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices are enabled such that if the switching element (*e.g.*, Apple Pay software) is in the activated state (*e.g.*, NFC transaction), a data exchange (*e.g.*, NFC transaction) will be initiated through the instrumentality of the data transceiver (*e.g.*, NFC functionality) for exchanging data between the electronic circuit (*e.g.*, a processor, memory, and various I/O ports) and an external data exchange device (*e.g.*, the point-of-sale system interface). For example, Apple mobile devices will enter an NFC transaction state when a user double-clicks the side button and receives a signal from a POS device. Alternatively, if the user double-clicks the side button in a default state, when no signal from a POS device is received, it will be in an in-app or online transaction state. The Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with a point-of-sale system, such as an NFC reader. See https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023).

44. Apple denies the allegations contained in Paragraph 44.

Complaint No. 45: As in claim 1 of the '333 Patent, upon information and belief, the Apple mobile devices are enabled such that if the switching element (*e.g.*, Apple Pay software) is in the inactive state (*e.g.*, idle state), data will be conveyed from the electronic circuit (*e.g.*, a processor, memory, and various I/O ports) to the user interface device for communicating

information (*e.g.*, opening the Apple Pay application) to the portable electronic device holder. See https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023).

45. Apple denies the allegations contained in Paragraph 45.

Complaint No. 46: Defendant makes, uses, sells, and/or offers to sell the Accused Products, which practice at least claims 1, 2, 4, 5, 6, 11, and 13 of the '333 Patent.

46. Apple admits that it makes, uses, sells, and/or offers to sell the accused products in the United States but specifically denies that they practice any claim of the '333 patent.

Complaint No. 47: In violation of 35 U.S.C. § 271, Defendant is now, and has been, directly infringing the '333 Patent, including through its own use, testing, and sale of the Accused Products.

47. Apple denies the allegations contained in Paragraph 47.

Complaint No. 48: Defendant has had knowledge of infringement of the '333 Patent at least as of the service of this Complaint.

48. Apple denies the allegations contained in Paragraph 48.

Complaint No. 49: However, Defendant also has had knowledge of infringement of the '333 Patent by July 26, 2017, when a representative for G. Holdings Inc., the former owner of the '333 Patent, contacted Apple regarding the '333 Patent, it received a response from an Apple representative.

49. Apple admits that it was contacted by an individual from Tangible IP that purported to be a representative of G. Holdings Ltd. on July 30, 2017 and that an Apple representative responded to the individual at Tangible IP. Apple denies the remaining allegations contained in Paragraph 49 and expressly denies that Apple had knowledge of infringement of the '333 patent.

Complaint No. 50: Defendant has directly infringed and continues to directly infringe at least one claim of the '333 Patent by making, using, offering for sale, and selling the Accused Products without authority in the United States. As a direct and proximate result of Defendant's direct infringement of the '333 Patent, DH International has been and continues to be damaged.

50. Apple denies the allegations contained in Paragraph 50.

Complaint No. 51: By engaging in the conduct described herein, Defendant has injured DH International and is thus liable for infringement of the '333 Patent, pursuant to 35 U.S.C. § 271.

51. Apple denies the allegations contained in Paragraph 51.

Complaint No. 52: Defendant has committed these acts of infringement without license or authorization.

52. Apple denies the allegations contained in Paragraph 52.

Complaint No. 53: As a result of Defendant's infringement of the '333 Patent, Plaintiff has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate for Defendant's past infringement, together with interests and costs.

53. Apple denies the allegations contained in Paragraph 53.

Complaint No. 54: Plaintiff reserves the right to modify its infringement theories as discovery progresses in this case; it shall not be estopped for infringement contention or claim construction purposes by the claim chart that it provides with this Complaint. The claim chart depicted in **Exhibit D** is intended to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure and does not represent Plaintiff's preliminary or final infringement contentions or preliminary or final claim construction positions.

54. To the extent a response is required, Apple denies the allegations contained in Paragraph 54.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 9,022,294

Complaint No. 55: Plaintiff restates, realleges, and incorporates by reference each and every allegation set forth in Paragraphs 1 - 54 of this Complaint.

55. Apple incorporates its responses to Paragraphs 1 through 54 herein by reference.

Complaint No. 56: Defendant has directly infringed and continues to infringe at least claim 1 of the '294 Patent in violation of 35 U.S.C. § 271 *et seq.*, by making, using, offering for sale, selling in the United States, and/or importing into the United States without authority or license the Accused Products.

56. Apple denies the allegations contained in Paragraph 56.

Complaint No. 57: The Accused Products meet all the limitations of at least claim 1 of the '294 Patent.

57. Apple denies the allegations contained in Paragraph 57.

Complaint No. 58: Specifically, claim 1 of the '294 Patent recites:

A cellular phone, comprising:

an electronic circuit capable of storing data therein, capable of processing data, and capable of data input and output;

a user-triggered control device operatively linked to said electronic circuit, said user-triggered control device configured to be operated by a user via one of a button, a keypad, a tactile screen, and a biometric parameter detector, and after being operated issue an invariable activation command,

with said invariable activation command being issued when said control device is selectively triggered by the user;

a first data transceiver operatively linked to said electronic circuit, said first data transceiver being for exchanging data between said electronic circuit and a first external data exchange device over a first communication link;

a second data transceiver operatively linked to said electronic circuit, said second data transceiver being for exchanging data between said electronic circuit and a second external data exchange device over a second communication link that is distinct from said first communication link;

a cue receiver operatively linked to said electronic circuit for receiving an activation cue from a source external to said cellular phone;

a data conveyance switching element operatively linked to said electronic circuit, said switching element being assigned a first state upon an activation cue having been received by said cue receiver, and being assigned a second state when no activation cue was received by said cue receiver;

and power means for providing power to said portable electronic device cellular phone; wherein upon said control device being selectively triggered by the user to issue said invariable activation command;

if said switching element is in said first state, a first data conveyance operation will be initiated through the instrumentality of said first data transceiver for sending data from said electronic circuit to the first external data exchange device over said first communication link;

and if said switching element is in said second state, a second data conveyance operation will be initiated through the instrumentality of said second data transceiver for sending data from

said electronic circuit to the second external data exchange device over said second communication link.

58. Apple admits that Paragraph 58 recites the limitations of claim 1 of the '294 Patent. Apple denies any remaining allegations in Paragraph 58.

Complaint No. 59: A non-limiting and exemplary claim chart comparing the Accused Products to at least claim 1 of the '294 Patent is attached as **Exhibit E** and is incorporated by reference in its entirety. This description is based on publicly available information. Plaintiff reserves the right to modify this description, including, for example, on the basis of information about the Accused Products that it obtains during discovery.

59. Apple denies that any of its products or services infringe the asserted patents. Apple denies the remaining allegations contained in Paragraph 59.

Complaint No. 60: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices include an electronic circuit (*e.g.*, a processor, memory, and various I/O ports) capable of storing data therein, capable of processing data, and capable of data input and output. For example, the Apple iPhone 11 Pro Max and iPhone 13 Pro contain electronic circuits that include a processor, memory, and various I/O ports. *See*https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5,

60. Apple denies the allegations contained in Paragraph 60.

2023).

Complaint No. 61: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices include a user-triggered control device (*e.g.*, a button selection with biometric or PIN verification) operatively linked to said electronic circuit (*e.g.*, a processor,

memory, and various I/O ports), said user-triggered control device configured to be operated by a user via one of a button, a keypad, a tactile screen, and a biometric parameter detector, and after being operated issue an invariable activation command (*e.g.*, command to initiate a transaction), with said invariable activation command being issued when said control device is selectively triggered by the user (*e.g.*, initiated within a selected context). For example, the Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with an NFC reader. *See* https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023). In addition, Apple Pay can be used for in-app or online purchases by tapping the Apple Pay button. *Id*.

61. Apple denies the allegations contained in Paragraph 61.

Complaint No. 62: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices include a first data transceiver (*e.g.*, NFC functionality) operatively linked to said electronic circuit (*e.g.*, a processor, memory, and various I/O ports), said first data transceiver being for exchanging data (*e.g.*, transaction information) between said electronic circuit and a first external data exchange device (*e.g.*, a point-of-sale system interface) over a first communication link (*e.g.*, NFC). For example, the iPhone 11 Pro Max and iPhone 13 Pro include NFC chips for NFC communications. *See*https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

62. Apple denies the allegations contained in Paragraph 62.

Complaint No. 63: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices include a second data transceiver (*e.g.*, cellular or WiFi functionality)

operatively linked to said electronic circuit (*e.g.*, a processor, memory, and various I/O ports), said second data transceiver being for exchanging data (*e.g.*, transaction information) between said electronic circuit and a second external data exchange device (*e.g.*, a networked transaction server) over a second communication link (*e.g.*, cellular or WiFi) that is distinct from said first communication link (*e.g.*, NFC). For example, the iPhone 11 Pro Max and iPhone 13 Pro include a WiFi module and an RF transceiver. *See*https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5,

2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

63. Apple denies the allegations contained in Paragraph 63.

Complaint No. 64: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices include a cue receiver (e.g., NFC functionality) operatively linked to said electronic circuit (e.g., a processor, memory, and various I/O ports) for receiving an activation cue (e.g., a signal from an NFC device) from a source external (e.g., a point-of-sale system NFC interface) to said cellular phone. For example, the iPhone 11 Pro Max and iPhone 13 Pro include NFC chips for NFC communications. *See*

https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

64. Apple denies the allegations contained in Paragraph 64.

Complaint No. 65: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices include a data conveyance switching element (*e.g.*, Apple Pay software) operatively linked to said electronic circuit (*e.g.*, a processor, memory, and various I/O ports),

said switching element being assigned a first state (*e.g.*, NFC transaction) upon an activation cue (*e.g.*, a signal from an NFC device) having been received by said cue receiver (*e.g.*, NFC functionality), and being assigned a second state (*e.g.*, online or in-app transaction) when no activation cue was received by said cue receiver. For example, Apple mobile devices will enter an NFC transaction state when a user double-clicks the side button and receives a signal from a POS device. Alternatively, if the user double-clicks the side button in a default state, when no signal from a POS device is received, it will be in an in-app or online transaction state. The Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with a point-of-sale system, such as an NFC reader. *See* https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023).

65. Apple denies the allegations contained in Paragraph 65.

Complaint No. 66: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices include power means for providing power to the portable electronic device cellular phone. For instance, each of the Apple mobile devices include a battery that powers the electronic device. For example, the iPhone 11 Pro Max and iPhone 13 Pro include batteries to power the phones. *See*

https://www.ifixit.com/Teardown/iPhone+11+Pro+Max+Teardown/126000 (last visited Sept. 5, 2023); https://www.ifixit.com/Teardown/iPhone+13+Pro+Teardown/144928 (last visited Sept. 5, 2023).

66. Apple denies the allegations contained in Paragraph 66.

Complaint No. 67: As in claim 1 of the '294 Patent, upon information and belief, the Apple mobile devices are designed such that upon the control device being selectively triggered

by the user (*e.g.*, initiated within a selected context) to issue said invariable activation command (*e.g.*, command to initiate a transaction). For example, the Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with an NFC reader. *See*https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023). In addition, Apple Pay can be used for in-app or online purchases by tapping the Apple Pay button. *Id*.

67. Apple denies the allegations contained in Paragraph 67

Complaint No. 68: As in claim 1 of the '294 Patent, upon information and belief, for the Apple mobile devices, if the switching element (*e.g.*, Apple Pay software) is in the first state (*e.g.*, NFC transaction), a first data conveyance operation (*e.g.*, NFC transaction) will be initiated through the instrumentality of the first data transceiver (*e.g.*, NFC functionality) for sending data from the electronic circuit to the first data exchange device (*e.g.*, the point-of-sale system interface) over the first communication link (*e.g.*, NFC). The Apple Pay support site explains that a combination of double-clicking the side button and face ID/passcode, or button click and fingerprint, is required to initiate an in-store transaction with an NFC reader. *See*https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023).

68. Apple denies the allegations contained in Paragraph 68.

Complaint No. 69: As in claim 1 of the '294 Patent, upon information and belief, for the Apple mobile devices, if the switching element (*e.g.*, Apple Pay software) is in said second state (*e.g.*, in-app or online transaction), a second data conveyance operation (*e.g.*, cellular or WiFi transaction) will be initiated through the instrumentality of said second data transceiver (*e.g.*, cellular or WiFi functionality) for sending data from said electronic circuit to the second external data exchange device (*e.g.*, a networked transaction server) over said second communication link

(e.g., cellular or WiFi). See https://support.apple.com/en-us/HT201239 (last visited Sept. 5, 2023).

69. Apple denies the allegations contained in Paragraph 69.

Complaint No. 70: Defendant makes, uses, sells, and/or offers to sell the Accused Products, which practice at least claims 1, 2–4, 8–10, 12, and 16–8 of the '294 Patent.

70. Apple admits that it makes, uses, sells, and/or offers to sell the accused products in the United States but specifically denies that they practice any claim of the '294 patent.

Complaint No. 71: In violation of 35 U.S.C. § 271, Defendant is now, and has been, directly infringing the '294 Patent, including through its own use, testing, and sale of the Accused Products.

71. Apple denies the allegations contained in Paragraph 71.

Complaint No. 72: Defendant has had knowledge of infringement of the '294 Patent at least as of the service of this Complaint.

72. Apple denies the allegations contained in Paragraph 72.

Complaint No. 73: However, Defendant also has had knowledge of infringement of the '294 Patent by July 26, 2017, when a representative for G. Holdings Inc., the former owner of the '294 Patent, contacted Apple regarding the '294 Patent, it received a response from an Apple representative.

73. Apple admits that it was contacted by an individual from Tangible IP that purported to be a representative of G. Holdings Ltd. on July 30, 2017 and that an Apple representative responded to the individual at Tangible IP. Apple denies the remaining allegations contained in Paragraph 73 and expressly denies that Apple had knowledge of infringement of the '294 patent.

Complaint No. 74: Defendant has directly infringed and continues to directly infringe at least one claim of the '294 Patent by making, using, offering for sale, and selling the Accused Products without authority in the United States. As a direct and proximate result of Defendant's direct infringement of the '294 Patent, DH International has been and continues to be damaged.

74. Apple denies the allegations contained in Paragraph 74.

Complaint No. 75: By engaging in the conduct described herein, Defendant has injured DH International and is thus liable for infringement of the '294 Patent, pursuant to 35 U.S.C. § 271.

75. Apple denies the allegations contained in Paragraph 75.

Complaint No. 76: Defendant has committed these acts of infringement without license or authorization.

76. Apple denies the allegations contained in Paragraph 76.

Complaint No. 77: As a result of Defendant's infringement of the '294 Patent, Plaintiff has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate for Defendant's past infringement, together with interests and costs.

77. Apple denies the allegations contained in Paragraph 77.

Complaint No. 78: Plaintiff reserves the right to modify its infringement theories as discovery progresses in this case; it shall not be estopped for infringement contention or claim construction purposes by the claim chart that it provides with this Complaint. The claim chart depicted in **Exhibit E** is intended to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure and does not represent Plaintiff's preliminary or final infringement contentions or preliminary or final claim construction positions.

78. To the extent a response is required, Apple denies the allegations contained in Paragraph 78.

DEMAND FOR JURY TRIAL

Complaint No. 79: DH International demands a trial by jury on all claims and issues.

79. DH International's demand for jury trial does not contain facts that Apple must admit or deny. Apple demands trial by jury on all claims, defenses, and issues.

REQUEST FOR RELIEF

Apple denies that DH International is entitled to any relief requested in its Request for Relief, either as requested or otherwise. To the extent that DH International's Request for Relief may be deemed to allege any facts, Apple denies each and every such allegation.

AFFIRMATIVE DEFENSES

Apple reserves the right to amend its Answer, including by asserting any additional defenses as they become known during the course of this action. Without altering any applicable burden of proof, Apple asserts the following affirmative defenses:

FIRST AFFIRMATIVE DEFENSE (Failure to State a Claim)

 DH International's Complaint fails to state a claim upon which relief can be granted.

SECOND AFFIRMATIVE DEFENSE (Invalidity)

2. One or more of the claims of the '333 and '294 patents (collectively, the "asserted patents") are invalid for failure to meet the conditions of patentability and/or otherwise comply with one or more provisions of 35 U.S.C. §§ 101 *et seq.*, including 35 U.S.C. §§ 101, 102, 103 and/or 112. Apple incorporates the allegations in its forthcoming invalidity contentions.

THIRD AFFIRMATIVE DEFENSE

(Noninfringement)

3. Apple has not infringed, and currently does not infringe, any valid claim of the asserted patents directly, indirectly, contributorily, by inducement, under the doctrine of equivalents, or in any other manner. The Apple products identified by DH International in the Complaint, and any other Apple products alleged to infringe, do not infringe any claim of the asserted patents, and Apple has not performed any act and is not proposing to perform any act in violation of any rights validly belonging to DH International.

FOURTH AFFIRMATIVE DEFENSE

(Exhaustion and License)

4. DH International's claims, in whole or in part, are barred by the doctrine of patent exhaustion and/or implied license.

FIFTH AFFIRMATIVE DEFENSE (Laches/Estoppel)

- 5. DH International is estopped from pursuing infringement allegations in this litigation, including but not limited to prosecution history estoppel from construing the claims of the asserted patents in such a way as may cover any of Apple's products or services, in whole or in part, based on statements, representations, and admissions made during the prosecution of the asserted patents.
- 6. DH International is estopped from pursuing infringement allegations in this litigation under the doctrine of laches. DH International admits above that on or about July 26, 2017 (over six years ago), a representative for G. Holdings Ltd., the former owner of the '294 Patent, contacted Apple regarding both of the asserted patents. G. Holdings Ltd. and its successors, including DH International, then failed to file an action for patent infringement or otherwise pursue any relief for over six years.

SIXTH AFFIRMATIVE DEFENSE (Limitation on Damages and Costs)

- 7. DH International's claim for damages is limited under at least 35 U.S.C. §§ 286, 287, and/or 288.
- 8. DH International is precluded from seeking pre-suit damages due to noncompliance with the marking and actual notice requirements under 35 U.S.C. § 287(a).
- 9. DH International is barred from recovering costs in connection with this action under 35 U.S.C. § 288.

RESERVATION OF AFFIRMATIVE DEFENSES

10. Apple hereby reserves the right to supplement its affirmative defenses as discovery proceeds in this case.

PRAYER FOR RELIEF

WHEREFORE, Apple prays for judgment as follows:

- A. DH International takes nothing by way of its Complaint;
- B. A judgment in favor of Apple and against DH International, thereby dismissing
 DH International's Complaint in its entirety, with prejudice, and deny DH
 International all requested relief;
- C. A declaration that Apple has not infringed, either directly or indirectly, any valid claims of the asserted patents;
- D. An award to Apple of its fees and expenses of litigation;
- E. An entry of judgment against DH International for the amount of damages that
 Apple proves at trial; and
- F. Such other and further relief as this Court may deem just and proper.

Dated: February 20, 2024 Respectfully submitted,

/s/ John M. Guaragna

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ATTORNEY FOR DEFENDANT APPLE INC.

CERTIFICATE OF SERVICE

I hereby certify that on February 20, 2024, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system, which will send notification of such filing via electronic mail to all counsel of record. Any other counsel of record will be served by first class U.S. mail.

/s/ John M. Guaragna
John M. Guaragna